

## AMENDMENTS TO THE SPECIFICATION

Please amend the specification as follows:

Please replace the paragraph beginning on page 1, line 16 with the following amended paragraph:

The description which follows presupposes knowledge of network data communications and switches, network processors, adapters, routers, etc. as used in such communications networks. In particular, the description presupposes familiarity with the ~~ISO~~ OSI model of network architecture which divides network operation into layers. A typical architecture based upon the ~~ISO~~ OSI model of network architecture which divides network operation into layers. A typical architecture based upon the ~~ISO~~ OSI model extends from Layer 1 (also sometimes identified as "L1") being the physical pathway or media through which signals are passed upwards through Layers 2, 3, 4 and so forth to Layer 7, the last mentioned being the layer of applications programming running on a computer system linked to the network. In this document, mention of L1, L2 and so forth is intended to refer to the corresponding layer of a network architecture. The ~~disclosures~~ disclosure also presupposes a fundamental understanding of bit strings known as packets and frames in such network communication.

Please replace the paragraph beginning on page 4, line 20 with the following amended paragraph:

The accelerator includes a memory called a cache in which characteristics of TCP packets called four-tuple (described herein) are stored. The four-tuple include Internet

Protocol (IP) SA, the IP DA, the Transmission Control Protocol (TCP) source port (SP) and the destination port (DP). Actions associated with each of the four-tuple are also stored. Match logic correlates the four-tuple in a received packet with the four-tuple in the cache. If a match occurs the actions associated with the four-tuple in the ~~enter~~ cache is applied to the received packet. If a match does not occur the regular process used to classify a packet of that type is followed. Specific methods and apparatus are provided to populate and dynamically age the Flow Cache. The cache and related hardware and/or software are termed "Flow Cache".